

Abstract

An apparatus and method for directing airflow to a target surface or substantially enclosed volume is described. The apparatus comprises of one or more air channels with one or more directed air flow ducts to the surface. Each of the air ducts may feature numerous outlets that disperse unheated or hot air onto a target surface or within a substantially enclosed volume.

The one or more air channels may be made of vinyl, rip-stop, or materials that are temperature-appropriate. The apparatus is held in place by it's effective air-weight or secured to prevent slippage during operation. Several such apparatuses may be incorporated into a vehicle to transfer air or gas to individual surfaces.

The unit contains a substantially circular air duct and an electrical feed or other power source. The apparatus unit attaches to a hose vent or other external air flow apparatus and extends along the target surface or within the substantially enclosed volume. Air flow may be controlled from a switch or other control mechanism associated with the apparatus or the external air flow apparatus.

When the control mechanism is actuated to activate the external air flow apparatus and the apparatus, air flows from the external air flow apparatus. Air pressure resulting from the flow of air substantially inflates the apparatus. The flow of air is discharged through apertures positioned along a surface of an air channel and diffuses the air flow along the target surface.

In one embodiment, the air flow is comprised of heated air. Heating the target surface substantially removes condensed water, ice, frost, and the like from the target surface, and prevents further condensation from appearing on the target surface while the apparatus is activated. In addition, heating the air flow to a substantially enclosed volume assists in increasing the temperature of the substantially enclosed volume. In another embodiment,

air that has been cooled or lowered in temperature, or air with no temperature adjustment may also be used.